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10/536,707

05/27/2005

Hanno Scholtz

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EXAMINER

DICKERSON, TIPHANY B

ART UNIT

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4156

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|---------------------------------------|--|
| Office Action Summary | Application No. 10/536,707 | Applicant(s) SCHOLTZ, HANNO | |
| | Examiner TIPHANY DICKERSON | Art Unit 4156 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-8 directed to “a procedure,” are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The Office understands the recited phrasing, “a procedure” to mean “a process” for examining purposes.

In order for a method to be considered a "process" under §101, a claimed process must either: (1) be tied to another statutory class (such as a particular apparatus) or (2) transform underlying subject matter (such as an article or materials). *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972). If neither of these requirements is met by the claim, the method is not a patent eligible process under §101 and is non-statutory subject matter.

Claim 1 is not sufficiently tied to another statutory class because the language therein does not require a product or machine to accomplish the steps. None of the limitations of claim 1 necessitate a machine, so the limitations are merely a series of mental steps. Claims 2-8 are further limitations describing the mental steps of Claim 1 that fail to add any further substance to bring them in compliance with § 101, so they do not comply for the reasons stated under claim 1.

Claim Rejections - 35 USC § 102

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. **Claims 1-3 and 5-8** are rejected under 35 U.S.C. 102(e) as being anticipated by *Afeyan* et al., U.S. Patent Publication 2004/0203957 (hereinafter *Afeyan*).

Concerning claim 1, *Afeyan* discloses a procedure for the selection of options (i.e. design alternatives) to be allocated to targets (i.e. derived forms) wherein each option belongs to one or more sets of criteria (i.e. attributes) to achieve evaluatable results, [See Abstract] characterized in that

- a. information carriers (i.e. selectors or voters, used interchangeably) allocate confidence values to the sets of criteria [0034], (wherein confidence values are data indicative of their [selectors'] preferences among...alternatives); See also [0027-0028 and 0041];
- b. all information carriers can allocate an equal number of confidence values [0083] (wherein a single selector is allowed a single vote); (See also [0096] which describes a plurality voting context wherein "every voter votes for his or her most preferred n alternatives, where n is the number of candidates to be elected.")
- c. the sets of criteria transfer confidence values obtained to their options, (i.e. design candidates) [0034];
- d. the options (i.e. design candidates) are allocated to the targets according to the confidence values transferred to them [0034].

Concerning claim 2, *Afeyan* discloses the procedure according to claim 1 characterized in that the confidence values transferred by the sets of criteria to the options are stretched or compressed by means of weighting factor of larger or smaller than 1 according to the correlation of the options with the association of the sets of criteria [0124 and 0129] (where in the scaling of selector responses is disclosed, including a weighting factor disclosed at [0126 and 0127].

Concerning claim 3, *Afeyan* discloses the procedure according to claim 1 characterized in that the confidence values allocated by the information carriers are stretched or compressed prior to their summation in the sets of criteria [0035] (i.e. data from the selector is given disproportionate influence...); [0042] (wherein many known algorithmic and other computational analysis techniques are used in weigh the attributes of the options, i.e. :product forms derived”, from the expressed preferences).

Concerning claim 5, *Afeyan* discloses the procedure according to claim 1 characterized in that the information carriers (selectors) can repeatedly change the allocation of their confidence values at any time or at defined time points [0275] (wherein selectors may change their votes based on viewing other selectors' votes).

Concerning claim 6, *Afeyan* discloses the procedure according to claim 5 characterized in that the options at the targets can be exchanged continuously or at defined time points depending on the actual allocation of the confidence values [0046] (during the iterative process, the targets in each derived group or next generation of products dynamically change based on captured data from the selector's input during the last generation).

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Concerning claim 7, *Afeyan* discloses the procedure according to claim 1 characterized in that the information carriers can continuously gather information about the actual assignment of the targets. [0046] (where selectors have the ability to see the derived forms).

Concerning claim 8, *Afeyan* discloses the procedure according to claim 1 characterized in that the confidence values (i.e., feedback) are communicated by means of linked computers [0030 and 0038], (wherein feedback of [0030] is collected via individual personal computers connected in a network such as an intranet or the Internet).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Afeyan* in view of *Gunst*,

Richard F. "Logarithmic power." Quality Progress 31.10 (1998): 101-107 (hereinafter *Gunst*).

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Afeyan discloses the procedure according to claim 1 characterized in that the confidence values (2) transferred to the options (4) by the sets of criteria (3) are stretched or compressed by disproportionate, as discussed in Claim 3. Although *Afeyan* discloses that *many known computational techniques can be exploited*, *Afeyan* fails to particularly note the use of logarithmic factors to transform data. The *Gunst* reference, however, discussed the broad usage of logarithmic transformations in standardizing data and when the usage is appropriate. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the general disclosure of *Afeyan* regarding the method of stretching and compressing data with the specific method disclosed in *Gunst*. The *Gunst* simply discloses in more detail, the methods implied in *Afeyan*.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. *Ulwick*, U.S. Patent 5,963,910 discloses a strategy evaluation and optimization method based on customer desired outcomes and predictive metrics. The system disclosed in *Negishi*, U.S. Patent 5,444,819 uses logarithmic transformations for weighting data.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TIPHANY DICKERSON whose telephone number is (571)270-7048. The examiner can normally be reached on M-F 7:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Kyle can be reached on (571)272-6746. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/TIPHANY DICKERSON/

Examiner, Art Unit 4156

November 4, 2008

/Charles R. Kyle/

Supervisory Patent Examiner, Art Unit 4156